ENGINEERING STRUCTURES

Index to Volume 14 (1992)

No 1 (January) pp 1 – 64
No 2 (March) pp 65 – 136
No 3 (May) pp 137 – 208
No 4 (July) pp 209 – 280
No 5 (September) pp 281 – 352
No 6 (November) pp 353 – 424

Article Index

January (pp 1 – 64)

A study of localized collapse of a beam-column
A. Kasagi and S. Sridharan 2 – 6
European calibration frames for second-order inelastic analysis
S. Toma and W.-F. Chen 7 – 14
A simplified model for linear dynamic analysis of planar frame-wall systems
G. Oliveto and A. Santini 15 – 26
Extreme wind load distributions for linear and nonlinear design
M. Kasperski 27 – 34
Seismic responses of secondary systems in base-isolated structures
F.-G. Fan and G. Ahmadi 35 – 48
Approximate seismic analysis of inelastic asymmetric structures
A. W. Sadek, M. E. Sobaih and H. S. Esmail 49 – 62

March (pp 65 – 136)

Efficiency of helical springs and viscodampers in base isolation
S. S. Tezcan and A. Civi 66 – 74
Seismic *P*-δ effects in medium height resisting steel frames
J. A. Tjondro, P. J. Moss and A. J. Carr 75 – 90
Inelastic seismic response of code designed single storey asymmetric structures
A. Rutenberg, M. Eisenberger and G. Shohet 91 – 102
Analysis of compression of hollow circular elastomeric bearings
M. C. Constantinou, A. Kartoum and J. M. Kelly 103 – 111
Reliability of offshore guyed tower against anchor pile failure
Chung-Soon Ryu and Chung-Bang Yun 112 – 120
Stability of thin-walled members having arbitrary flange shape and flexibility web
C. K. Chin, F. G. A. Al-Bermani and S. K. Kitipornchai 121 – 132

May (pp 137 – 208)

Nonlinear analysis of transmission towers
F. G. A. Al-Bermani and S. Kitipornchai 139 – 151
Cumulative damage for inelastic systems subjected to earthquake excitations: a comparative study
Chin-Hsiung Loh and Jung-Chi Chang 152 – 162
Experimental added-mass in modal vibration of cylindrical structures
M. R. Maheri and R. T. Severn 163 – 175
Analysis of structures subjected to random loading using the transfer matrix or numerical integration methods
J. D. Riera and R. D. Ambrosini 176 – 179
Nonlinear dynamic analysis of damped structures using the transfer matrix technique
I. A. Akintilo 180 – 187
Design of aluminium columns
Y. F. W. Lai and D. A. Nethercot 188 – 194
Analysis-based design equations for composite tubular connections
W. Aritenang, A. S. Elnashai and P. J. Dowling 195 – 204

July (pp 209 – 280)

In-plane dynamic interaction between a tower and conductors at lower frequencies
Shigehira Ozono and Junji Maeda 210 – 216
Probabilistic responses of base-isolated structures to El Centro 1940 and Mexico City 1985 earthquakes
L. Su and G. Ahmadi 217 – 230
Shooting – optimization technique for large deflection analysis of structural members
C. M. Wang and S. Kitipornchai 231 – 240
Strength of aluminium members containing local transverse welds
Y. F. W. Lai and D. A. Nethercot 241 – 254
Joint modelling of coupled shear walls using finite element displacement functions
I. A. Akintilo 255 – 262
Lateral strength distribution specification to limit additional inelastic deformation of torsionally unbalanced structures
W. K. Tso and H. Ying 263 – 277

September (pp 281 – 352)

Strumming of nonlinear cable elements using modal superposition
Hang Tuah and J. W. Leonard 282 – 290
Collapse simulation of reinforced concrete natural draught cooling towers
W. V. Krätzig and Y. Zhuang 291 – 299
Dynamic response of equipment in structures with consideration of tuning effect
R. Y. Tan and Y. T. Lung 300 – 308
Nonlinear dynamic analysis of steel plate shear walls including shear and bending deformations
S. Sabouri-Ghomi and T. M. Roberts 309 – 317
Directional correlations of seismic response of an asymmetric structure
Tao Liu and J. C. Wilson 318 – 326
Buckling of doubly-symmetric cantilevers with slender webs
M. A. Bradford 327 – 334
Infinite elements for 3-dimensional wave – structure interaction problems
Woo-Sun Park, Chung-Bang Yun and Chong-Kun Pyun 335 – 346

November (pp 353 – 424)

Effect of structural period and ground motion parameters on the earthquake response of asymmetric buildings
A. M. Chandler and G. L. Hutchinson 354 – 360
Axisymmetric infinite elements for soil – structure interaction analysis
Shin-Chu Yang and Chung-Bang Yun 361 – 370
Structural system reliability considerations with frame instability
J. J. Zimmerman, R. B. Corotis and J. H. Ellis 371 – 378
Analysis of lateral load transfer by internal slab-column joints
D. N. Farhey, D. Z. Yankelevsky and M. A. Adin 379 – 394
Dynamic response of a thin-walled cylinder to side pressure pulse
M. N. Islam, K. Kormi and S. T. S. Al-Hassani 395 – 423

ENGINEERING STRUCTURES

Index to Volume 14 (1992)

No 1 (January) pp 1 – 64
No 2 (March) pp 65 – 136
No 3 (May) pp 137 – 208
No 4 (July) pp 209 – 280
No 5 (September) pp 281 – 352
No 6 (November) pp 353 – 424

Article Index

January (pp 1 – 64)

A study of localized collapse of a beam-column
A. Kasagi and S. Sridharan 2 – 6
European calibration frames for second-order inelastic analysis
S. Toma and W.-F. Chen 7 – 14
A simplified model for linear dynamic analysis of planar frame-wall systems
G. Oliveto and A. Santini 15 – 26
Extreme wind load distributions for linear and nonlinear design
M. Kasperski 27 – 34
Seismic responses of secondary systems in base-isolated structures
F.-G. Fan and G. Ahmadi 35 – 48
Approximate seismic analysis of inelastic asymmetric structures
A. W. Sadek, M. E. Sobaih and H. S. Esmail 49 – 62

March (pp 65 – 136)

Efficiency of helical springs and viscodampers in base isolation
S. S. Tezcan and A. Civi 66 – 74
Seismic *P*-δ effects in medium height resisting steel frames
J. A. Tjondro, P. J. Moss and A. J. Carr 75 – 90
Inelastic seismic response of code designed single storey asymmetric structures
A. Rutenberg, M. Eisenberger and G. Shohet 91 – 102
Analysis of compression of hollow circular elastomeric bearings
M. C. Constantinou, A. Kartoum and J. M. Kelly 103 – 111
Reliability of offshore guyed tower against anchor pile failure
Chung-Soon Ryu and Chung-Bang Yun 112 – 120
Stability of thin-walled members having arbitrary flange shape and flexibility web
C. K. Chin, F. G. A. Al-Bermani and S. K. Kitipornchai 121 – 132

May (pp 137 – 208)

Nonlinear analysis of transmission towers
F. G. A. Al-Bermani and S. Kitipornchai 139 – 151
Cumulative damage for inelastic systems subjected to earthquake excitations: a comparative study
Chin-Hsiung Loh and Jung-Chi Chang 152 – 162
Experimental added-mass in modal vibration of cylindrical structures
M. R. Maheri and R. T. Severn 163 – 175
Analysis of structures subjected to random loading using the transfer matrix or numerical integration methods
J. D. Riera and R. D. Ambrosini 176 – 179
Nonlinear dynamic analysis of damped structures using the transfer matrix technique
I. A. Akintilo 180 – 187
Design of aluminium columns
Y. F. W. Lai and D. A. Nethercot 188 – 194
Analysis-based design equations for composite tubular connections
W. Aritenang, A. S. Elnashai and P. J. Dowling 195 – 204

July (pp 209 – 280)

In-plane dynamic interaction between a tower and conductors at lower frequencies
Shigehira Ozono and Junji Maeda 210 – 216
Probabilistic responses of base-isolated structures to El Centro 1940 and Mexico City 1985 earthquakes
L. Su and G. Ahmadi 217 – 230
Shooting – optimization technique for large deflection analysis of structural members
C. M. Wang and S. Kitipornchai 231 – 240
Strength of aluminium members containing local transverse welds
Y. F. W. Lai and D. A. Nethercot 241 – 254
Joint modelling of coupled shear walls using finite element displacement functions
I. A. Akintilo 255 – 262
Lateral strength distribution specification to limit additional inelastic deformation of torsionally unbalanced structures
W. K. Tso and H. Ying 263 – 277

September (pp 281 – 352)

Strumming of nonlinear cable elements using modal superposition
Hang Tuah and J. W. Leonard 282 – 290
Collapse simulation of reinforced concrete natural draught cooling towers
W. V. Krätzig and Y. Zhuang 291 – 299
Dynamic response of equipment in structures with consideration of tuning effect
R. Y. Tan and Y. T. Lung 300 – 308
Nonlinear dynamic analysis of steel plate shear walls including shear and bending deformations
S. Sabouri-Ghomi and T. M. Roberts 309 – 317
Directional correlations of seismic response of an asymmetric structure
Tao Liu and J. C. Wilson 318 – 326
Buckling of doubly-symmetric cantilevers with slender webs
M. A. Bradford 327 – 334
Infinite elements for 3-dimensional wave – structure interaction problems
Woo-Sun Park, Chung-Bang Yun and Chong-Kun Pyun 335 – 346

November (pp 353 – 424)

Effect of structural period and ground motion parameters on the earthquake response of asymmetric buildings
A. M. Chandler and G. L. Hutchinson 354 – 360
Axisymmetric infinite elements for soil – structure interaction analysis
Shin-Chu Yang and Chung-Bang Yun 361 – 370
Structural system reliability considerations with frame instability
J. J. Zimmerman, R. B. Corotis and J. H. Ellis 371 – 378
Analysis of lateral load transfer by internal slab-column joints
D. N. Farhey, D. Z. Yankelevsky and M. A. Adin 379 – 394
Dynamic response of a thin-walled cylinder to side pressure pulse
M. N. Islam, K. Kormi and S. T. S. Al-Hassani 395 – 423

Author Index

Adin, M. A., 379
Ahmadi, G., 35, 217
Akintilo, I. A., 180, 255
Al-Bermani, F. G. A., 121, 139
Al-Hassani, S. T. S., 395
Ambrosini, R. D., 176
Aritenang, W., 195

Bradford, M. A., 327

Carr, A. J., 75
Chandler, A. M., 354
Chang, J.-C., 152
Chen, W.-F., 7
Chin, C. K., 121
Civi, A., 66
Constantinou, M. C., 103
Corotis, R. B., 371

Dowling, P. J., 195

Eisenberger, M., 91
Ellis, J. H., 371
Elnashai, A. S., 195
Esmail, H. S., 49

Fan, F.-G., 35
Farhey, D. N., 379

Hutchinson, G. L., 354

Islam, M. N., 395

Kartoum, A., 103
Kasagi, A. K., 2
Kasperski, M., 27
Kelly, J. M., 103
Kitipornchai, S., 121, 139, 231
Kormi, K., 395
Kratzig, W. B., 291

Lai, Y. F. W., 188, 241
Leonard, J. W., 282
Liu, T., 318
Loh, C.-H., 152
Lung, Y. T., 300

Maeda, J., 210
Maheri, M. R., 163
Moss, P. J., 75

Nethercot, D. A., 188, 241

Oliveto, G., 15
Ozono, S., 210

Park, W.-S., 335

Riera, J. D., 176
Roberts, T. M., 309
Rutenberg, A., 91
Ryu, C.-S., 112

Sabouri-Ghomi, S., 309
Sadek, A. W., 49
Santini, A., 15
Severn, R. T., 163
Shohet, G., 91
Sobaih, M. E., 49
Sridharan, S., 2
Su, L., 217

Tan, R. Y., 300
Tezcan, S. S., 66
Tjondro, J. A., 75
Toma, S., 7
Tso, W. K., 263
Tuah, H., 282

Wang, C. M., 231
Wilson, J. C., 318

Yang, S.-C., 361
Yankelevsky, D. Z., 379
Ying, H., 263
Yun, C.-B., 112, 335, 361

Zhuang, Y., 291
Zimmerman, J. J., 371

Keyword Index

Added mass
Cylindrical structures, Vibration, 163
Aluminium alloys
Heat-affected zones, Buckling welds, 241
Aluminium structures
Buckling, Structural design, 188
Analysis
Frames, Calibration, 7
Steel frames, Earthquake motions, 75
Grouted tubular connections, Design equations, 195
Anchor pile failure
Offshore guyed tower, Structural reliability, 112
Asymmetric structures
Earthquake engineering, Inelastic behaviour, 49
Inelastic response, Seismic codes, 91
Seismic response, Directional correlations, 318

Base isolation
Vibration analysis, Viscodampers, 66
Base-isolated structures
Seismic response, Mathematical modelling, 35
Earthquake response, Mathematical modelling, 217
Beam-column
Localized collapse, Buckling, 2
Buckling
Localized collapse, Beam-column, 2
Finite element analysis, Thin-walled structure, 121
Aluminium structures, Structural design, 188
Cantilevers, Finite elements, 327
Buckling welds
Aluminium alloys, Heat-affected zones, 241
Building
Structural analysis, Earthquake resistant structures, 379

Calibration
Frames, Analysis, 7
Cantilevers
Buckling, Finite elements, 327
Collapse behaviour
Natural draught cooling towers, Eurocodes, 291
Coupled shear walls
Finite elements, Mathematical modelling, 255
Cylindrical structures
Vibration, Added mass, 163

Damped structures
Dynamic analysis, Mathematical modelling, 180
Design equations
Grouted tubular connections, Analysis, 195
Deterministic rigid-plastic analysis
Structural system reliability, Stability analysis, 371
Directional correlations
Seismic response, Asymmetric structures, 318
Dynamic analysis
Damped structures, Mathematical modelling, 180
Dynamic infinite element
Soil-structure interaction, Numerical integration scheme, 361
Dynamic interaction
Transmission line system, Towers, 210
Dynamic response
Steel plate shear walls, Nonlinear analysis, 309
Thin-walled cylinder, Mathematical modelling, 395
Earthquake damage
Mathematical modelling, Inelastic systems, 152
Earthquake engineering
Inelastic behaviour, Asymmetric structures, 49
Earthquake motions
Steel frames, Analysis, 75
Earthquake resistant design
Torsional coupling, Period dependent effects, 354
Earthquake resistant structures
Building, Structural analysis, 379
Earthquake response
Base-isolated structures, Mathematical modelling, 217
Elasto-plastic analysis
Formex algebra, Transmission tower, 139
Elastomer
Hollow circular bearings, Seismic isolation, 103
Equipment-structure interaction
Response spectrum, Seismic loadings, 300
Eurocodes
Natural draught cooling towers, Collapse behaviour, 291

Finite element analysis
Buckling, Thin-walled structure, 121
Finite elements
Coupled shear walls, Mathematical modelling, 255
Buckling, Cantilevers, 327
Flexible cables
Strumming, Hydrodynamic loading, 282
Formex algebra
Elasto-plastic analysis, Transmission tower, 139

Frame-wall structures
Linear dynamic analysis, Mathematical modelling, 15
Frames
Calibration, Analysis, 7
Grouted tubular connections
Analysis, Design equations, 195
Guyed structures
Wind loading, Numerical integration, 176

Heat-affected zones
Aluminium alloys, Buckling welds, 241
Hollow circular bearings
Elastomer, Seismic isolation, 103
Hydrodynamic forces
Offshore structures, Wave-structure interaction, 335
Hydrodynamic loading
Strumming, Flexible cables, 282
Inelastic behaviour
Earthquake engineering, Asymmetric structures, 49
Inelastic deformation
Seismic response, Structural analysis, 263
Inelastic response
Asymmetric structures, Seismic codes, 91
Inelastic systems
Earthquake damage, Mathematical modelling, 152

Linear dynamic analysis
Frame-wall structures, Mathematical modelling, 15
Load-response-correlation method
Wind loading, Nonlinear analysis, 27
Localized collapse
Buckling, Beam-column, 2

Mathematical modelling
Frame-wall structures, Linear dynamic analysis, 15
Base-isolated structures, Seismic response, 35
Earthquake damage, Inelastic systems, 152
Damped structures, Dynamic analysis, 180
Earthquake response, Base-isolated structures, 217
Coupled shear walls, Finite elements, 255
Thin-walled cylinder, Dynamic response, 395

Natural draught cooling towers
Collapse behaviour, Eurocodes, 291

Nonlinear analysis
Load-response-correlation method, Wind loading, 27
Steel plate shear walls, Dynamic response, 309
Numerical analysis
Shooting-optimization technique, Structural member analysis, 231
Numerical integration
Wind loading, Guyed structures, 176
Numerical integration scheme
Soil-structure interaction, Dynamic infinite element, 361

Offshore guyed tower
Anchor pile failure, Structural reliability, 112
Offshore structures
Wave-structure interaction, Hydrodynamic forces, 335

Period dependent effects
Torsional coupling, Earthquake resistant design, 354

Response spectrum
Equipment-structure interaction, Seismic loadings, 300

Seismic codes
Inelastic response, Asymmetric structures, 91
Seismic isolation
Elastomer, Hollow circular bearings, 103
Seismic loadings
Equipment-structure interaction, Response spectrum, 300
Seismic response
Base-isolated structures, Mathematical modelling, 35
Inelastic deformation, Structural analysis, 263
Asymmetric structures, Directional correlations, 318
Shooting-optimization technique
Numerical analysis, Structural member analysis, 231
Soil-structure interaction
Dynamic infinite element, Numerical integration scheme, 361
Stability analysis
Structural system reliability, Deterministic rigid-plastic analysis, 371
Steel frames
Earthquake motions, Analysis, 75
Steel plate shear walls
Nonlinear analysis, Dynamic response, 309
Structural analysis
Seismic response, Inelastic deformation, 263
Building, Earthquake resistant structures, 379
Structural design
Aluminium structures, Buckling, 188
Structural member analysis
Numerical analysis, Shooting-optimization technique, 231
Structural reliability
Offshore guyed tower, Anchor pile failure, 112
Structural system reliability
Stability analysis, Deterministic rigid-plastic analysis, 371
Strumming
Flexible cables, Hydrodynamic loading, 282

Thin-walled cylinder
Dynamic response, Mathematical loading, 395
Thin-walled structure
Finite element analysis, Buckling, 121
Torsional coupling
Earthquake resistant design, Period dependent effects, 354
Towers
Dynamic interaction, Transmission line system, 210
Transmission line system
Dynamic interaction, Towers, 210
Transmission tower
Elasto-plastic analysis, Formex algebra, 139

Vibration
Cylindrical structures, Added mass, 163
Vibration analysis
Base isolation, Viscodampers, 66
Viscodampers
Base isolation, Vibration analysis, 66
Wave-structure interaction
Offshore structures, Hydrodynamic forces, 335
Wind loading
Load-response-correlation method, Nonlinear analysis, 27
Numerical integration, Guyed structures, 176

Book Reviews 133, 278, 347

Calendar 64, 134, 205, 279, 351, 414